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CANADA GOOSE HARVEST AND HUNTER USE AT REND LAKE DURING THE 1975 SEASON

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Abstract: During the 1975 waterfowl season at Rend Lake a total of 1,710 Canada geese were harvested. Data was collected thru employment of combination bag checks/car counts and windshield card/car counts. The week of December 18 thru December 24 was best in terms of goose harvest with over 700 Canada geese harvested. An in-season population peak of 21,000 was observed on December 16, 1975. On January 22, 1975 an estimated 50,000 geese were at the Rend Lake area.

INTRODUCTION

During the 1975 waterfowl season a survey was initiated to determine the Canada goose harvest for the Rend Lake Wildlife Management Area. Harvest data provides a measuring device to assess waterfowl population condition, migrations, various habitat conditions and success of management programs. Hunter use information is valuable in determining patterns in hunting pressure, effects of regulations and general acceptance of public waterfowl management programs. These ideas provide a foundation on which biologist, site managers, staff and administrators can base future planning and development decisions.

The Rend Lake Wildlife Management Area is a cooperative project between the U.S. Corps of Engineers and the Illinois Department of Conservation and is approximately 16,000 acres of land and water.

The purpose of this report is to summarize Canada goose harvest data and hunter use for the Rend Lake area.

Appreciation is due to the following personnel for their participation in data collection - Site Manager Larry Leitner and his staff, Paul Allen and Max Newton, Biologists Jack Golden, Bill Mestel, Paul Moore and John Slachter. This project was partially financed under Pittman-Robertson Project W-43-R.

Dr. Ernie Lewis deserves special credit for assisting in sampling design and developing the prediction equations for estimating harvest. Also, Dave Kennedy deserves special thanks for his guidance throughout the project.

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METHODS AND MATERIALS

Data collection was accomplished by two means. These included car counts combined with bag checks and car counts combined with windshield cards. Bag checks were conducted three days per week (Tuesday, Thursday and Saturday) and the windshield cards were put-out four days per week (Monday, Wednesday, Friday, and Sunday). The parking lots to be surveyed were selected prior to conducting the actual checks. This was accomplished by assigning each parking lot or access area a number and randomly selecting these numbers from a random numbers table. Surveys of each type were conducted at two access areas daily.

Determination of the actual area of harvest was accomplished through the employment of a coding system. General highway maps for Jefferson and Franklin counties were obtained and each divided into distinct sections with a colored marker. These sections were then coded and this code number was written on the card prior to being placed on the windshield or on the bag check form. The assigned parking lot or access area number was used to designate harvest area on the lake itself.

License plate numbers were also written on the windshield cards prior to being placed on the cars. This hopefully encouraged hunters to return the cards.

Projections on harvest were done by several methods. To limit the size of this report, procedures for these projections have been omitted but are on file at the Union County Field Office.

Population data are taken from aerial inventories. These were conducted bi-weekly—weather permitting by biologists from Crab Orchard Refuge and the Illinois Department of Conservation (Fig. 1).

RESULTS AND DISCUSSION

Hunter Use

The results of the 1975 survey indicated there were 6,428 man days of hunter effort expended hunting waterfowl at Rend Lake from October 23 thru December 10 (the 1975 duck season). What percentage of this hunting effort was directed strictly towards Canada goose hunting is unknown. However, it is felt that the taking of Canada geese during this time was primarily a "side-light" to the duck hunting activity.

However, from December 11 thru December 30 a total of 2,062 man days of hunter effort was expended hunting geese. This hunting activity occurred primarily on the lake area although some activity was recorded on the private lands surrounding the lake.

Harvest

The initiated survey revealed a Canada goose harvest of 1,710 for the Rend Lake area. (The 95% confidence level on this is 858 to 2,561). A break-down of

the harvest reveals that 507 Canada geese were taken from October 23 thru December 10. From December 11 thru December 30 a total of 1,203 Canada geese were harvested on the lake area itself. Although no actual survey was conducted on the private areas, it is estimated that approximately 200 Canada geese were harvested on these areas (Personal Communication from Bill Mestel).

Harvest by week on the lake area is shown graphically in Fig. 2. The week of December 18 thru 24 was the best in terms of goose harvest with over 700 geese harvested that week.

Hunter Success

Hunter success per man days effort could not be determined for the period of October 23 thru December 10 nor could it be determined for the private areas. However, hunter success per man days effort for the lake area from December 11 thru December 30 was determined to be .58.

Population Status

Census figures for the Rend Lake area indicate a gradual increase in Canada goose numbers with an in-season peak of 21,000 on December 16 (Fig. 1). Also, according to census figures for January 22, 1976, an estimated 50,000 Canada geese were at the Rend Lake area.

Conclusion

With an estimated harvest of nearly 2,000 Canada geese, one can readily observe a need to continue a monitoring system on this area. The Rend Lake area is a relatively new area and an area with great potential. With this in mind, it is conceivable that this area could contribute an important factor towards Canada goose harvest in southern Illinois.

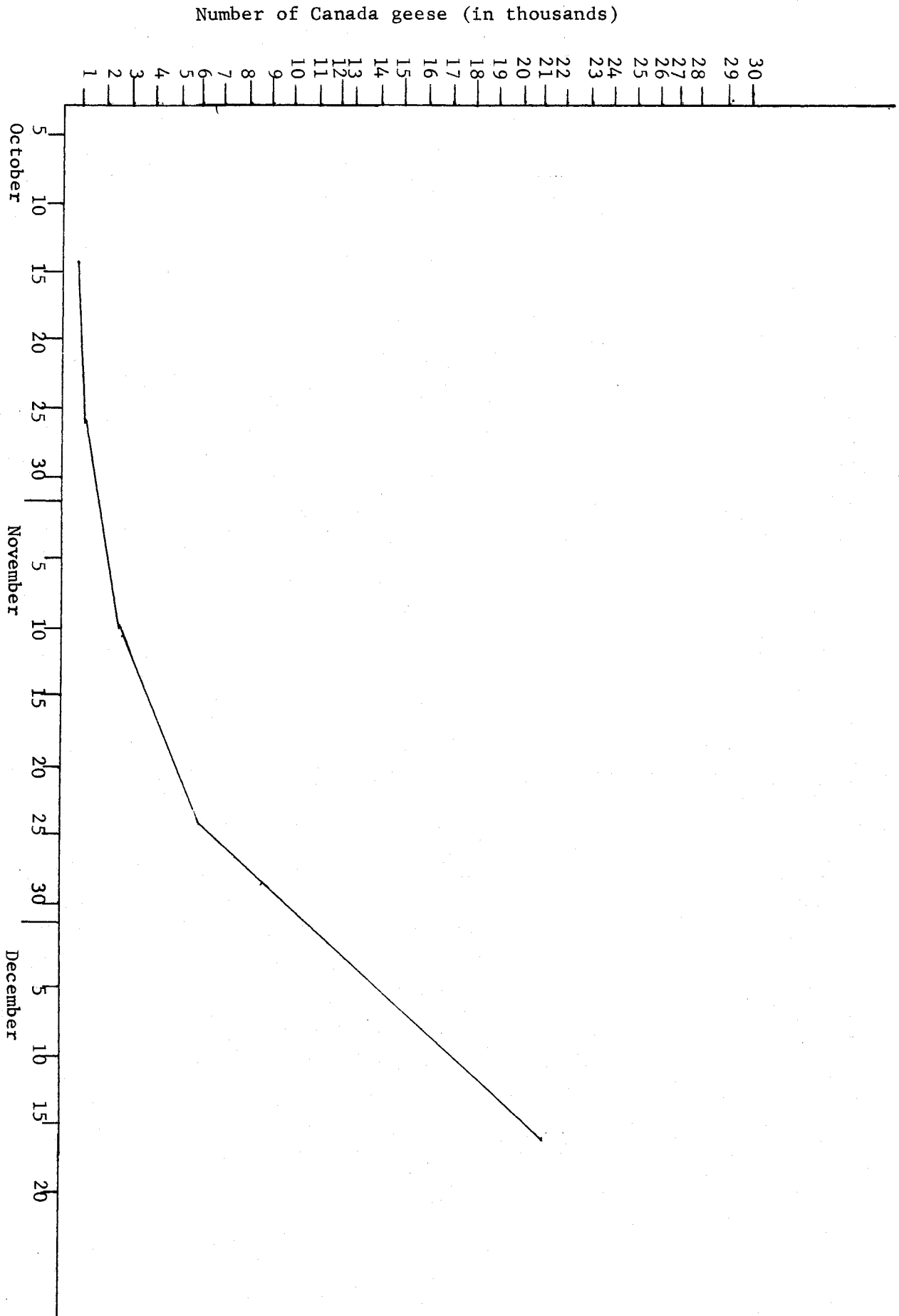


Figure 1. Canada goose populations throughout the fall at Rend Lake, 1975.

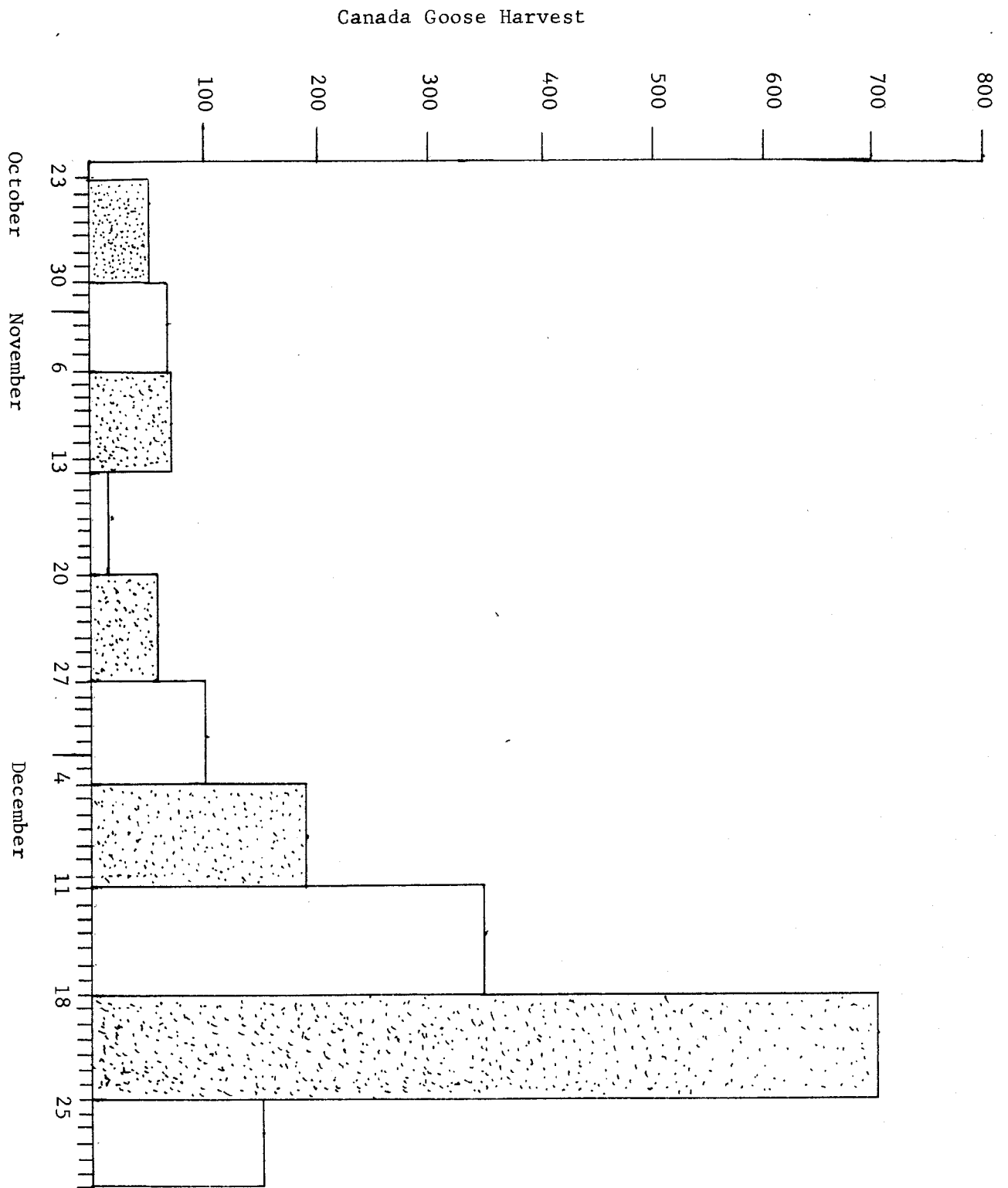


Figure 2. Canada goose harvest by week at Rend Lake during the 1975 season.